# Exhibit Information Station 2 NOAA Logo Rounder – Visitor Interaction Zone

### Here you will find:

- 1. The answers to the questions you might have seen posed on 4'x6' poster style exhibits spread around the Race Village. (Satellite, Whale, Chart, TJ, Hurricane rollups). See poster on easel for answers.
- 2. Opportunity to discuss NOAA topics of interest with visitors.

### For additional program specific talking points

#### 1. SARSAT-Coast Watch

- a) The Volvo Ocean Race sailing teams will for the first time have access a collection of data on ocean currents and other observations that are essential to helping captains navigate the global race course with speed and safety.
- b) A unique NOAA website accesses data for each leg of the Race serving as a one stop distribution site for oceanographic and atmospheric data.
- c) http://www.aoml.noaa.gov/phod/VOR.
- d) Products include maps of surface winds, ocean currents, sea surface temperature, drifter trajectories and modeled wave height and direction.
- e) Each vessel will be able to access the website and download data while in port or at sea in order to obtain near real-time information on oceanographic and meteorological conditions.
- f) These data are made available on line as easy to read graphic products, and are collected from multiple sources, including NOAA, the U.S. Navy, the National Aeronautics and Space Administration (NASA) and the European Space Agency (ESA).
- g) These products are currently used by scientists across the globe in their ocean and atmospheric research and are not developed specifically for the race.
- h) The (Search and Rescue Satellite) SARSAT program provides a unique and important component to the Volvo Race and in particular to the sailing vessels that will be in competition.
- i) Each vessel will carry an Emergency Position Indicating Radio Beacon (EPIRB) as part of their suite of safety equipment. If an emergency situation were to arise on the vessel, the EPIRB can be activated to begin the process of alerting the appropriate Search & Rescue (SAR) authorities.
- j) Vessels and aircraft around the world carry these emergency beacons that are activated during any kind of distress situation and NOAA provides continuous around the clock monitoring throughout much of the world's oceans.

## 2. Tides, Currents, Water levels

- a. NOAA provides real-time observations of water levels, coastal currents, and other meteorological and oceanographic data to help Volvo racers navigate the Bay.
- b. These data, when combined with up-to-date\* \*nautical charts and precise positioning information, can provide the mariner with a clearer picture of the potential dangers that can threaten navigation safety.

- c. For more information: <a href="http://tidesandcurrents.noaa.gov">http://tidesandcurrents.noaa.gov</a>, <a href="http://tidesandcurrents.noaa.gov/cbports/cbports.shtml?port=cb">http://tidesandcurrents.noaa.gov/cbports/cbports.shtml?port=cb</a>
- d. The Center for Operational Oceanographic Products and Services (CO-OPS) collects, analyzes and distributes historical and real-time observations and predictions of water levels, coastal currents and other meteorological and oceanographic data. These responsibilities are part of an integrated program supporting safe maritime navigation
- e. NOAA operates a real-time monitoring system for water levels, currents, salinity and windspeed/-direction in various ports of the USA. The system (PORTS), although focused on enhancing safe navigation and efficient maritime commerce, has great potential to significantly improve the efficiency of hydrographic surveys through the availability of real-time water levels and salinity.
- f. A grounded vessel can easily block a major channel and shut down a port, resulting in the loss of millions of dollars each day. NOAA science provides a path to prevention of such losses.

#### 3. Fisheries

- a. NOAA provides aerial surveillance (depending on weather conditions) of Right Whale Migration in the Atlantic Ocean. Sighting reports including area coverage are posted on the Internet.
- b. Right Whales are an endangered species and currently number about 300 worldwide
- c. The northwest Altantic stock of Northern right whales was listed as endangered under the Endangered Species Conservation Act on June 2, 1970 (35 FR 8495), the precursor to the Endangered Species Act (ESA). The species was subsequently listed as endangered under the ESA in 1973, and listed as depleted under the Marine Mammal Protection Act in the same year.
- d. The adult Northern right whale is between 13.5 to 16.5 meters long and weighs approximately 70 tons. They are glossy and black on the back with no dorsal fin and a v-shaped blow. The whale's habit of resting, feeding and courting at the water's surface makes them susceptible to ship collisions and entanglement in fixed fishing gear. These factors contribute to about one-third of known deaths, and many serious injuries.
- e. NOAA science supports the 13 million people inhabitants of the Chesapeake Bay watershed, for example the seafood as you see around the Race Village...the Chesapeake Bay is the source of fish and shellfish industry worth over \$850 million each year

# 4. NOAA Weather Radio & Forecasts

- a. Using satellites, airplanes, buoys, and other scientific instruments NOAA collects date for world-class research scientists to use in state-of-the-art models on supercomputers to create forecasts. These forecasts give Americans timely and reliable warnings before a storm strikes.
- b. Protecting life and property with reliable forecasts is one of NOAA's most important mission

- c. NOAA, through The National Weather Service (NWS) provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas. This information forms a national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community.
- d. This information is available to the Volvo Race organization, private meteorologists providing weather support to any of the boats, the race spectators, as well as to the general public.
- e. The National Center for Environmental Prediction issues meteorological guidance for the entire northern hemisphere.

#### 5. Nautical Charts

- a. NOAA produces the Official nautical charts of the United States and its possessions
- b. Data collected by ships, like the NOAA ship THOMAS JEFFERSON (Baltimore) or the Bay Hydrographer (Annapolis) are available for public viewing if you'd like to see the actual data collection up close. Directions to the ship should follow.

The Office of Coast Survey is responsible for producing nautical charts is the oldest U.S. scientific organization dating back to Thomas Jefferson who established the it in 1807 to encourage commerce and to support a growing economy in a safe and efficient manner